INITIAL STATEMENT OF REASONS

FOR
PROPOSED BUILDING STANDARDS
OF THE
OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

REGARDING THE
2007 CALIFORNIA ELECTRICAL CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 3

HEALTH FACILITIES CONSTRUCTION

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

STATEMENT OF SPECIFIC PURPOSE AND RATIONALE:

Article 517.30 – Essential Electrical Systems for Hospitals
This section is modified to clarify the provisions that allow hospitals to put loads onto the emergency generator even if the loads are not required by code to be on the emergency generator. The optional transfer switches are permitted to supply any load within a hospital that is not otherwise required to be supplied by the essential electrical system, including the receptacles required to be supplied by the normal system as described in Articles 517-18 and 517-19. The section is also modified to require an in-phase monitor relay on all transfer switches in order to prevent retransfer to the primary source until both sources are nearly synchronized.

Article 517.33 – Critical Branch
Editorial change to coordinate room names with the 2007 California Building Code and the 2007 California Mechanical Code.

Articles 700.27 and Article 701.18 – Coordination
OSHPD is proposing to not adopt these two model code articles of the 2005 National Electrical Code (NEC) that were incorporated into the 2007 California Electrical Code (CEC).

The NEC definition of selective “coordination” is defined in Article 100, as the localization of an overcurrent condition to restrict outages to the circuit or equipment affected. Only the overcurrent protection device immediately upstream from the fault or overcurrent is allowed to operate. This requirement cannot be met using only circuit breakers but requires either a combination of fuses and circuit breakers or fuses only. There are, however, numerous disadvantages to using fuses: 1) Replacement fuses are not always readily available of the same class and rating of the blown fuse. 2) There is a tendency to replace a blown fuse with a fuse of a different class and/or rating in order to restore power immediately, which would have serious consequences in providing future protection. 3) Even with available fuses, the amount of time to restore power would be longer. 4) If only one fuse blows in a three phase circuit, the resultant downstream panels would experience single phasing, which would be detrimental to certain three phase loads. 5) Fuse replacement normally requires disconnecting the power to the affected panel as a safety precaution and therefore counteracting the benefits of selective coordination. 6) Because the majority of health care facilities currently do not employ fuses, any modifications to an existing facility would require existing panels to be replaced with ones containing fuses resulting in added costs with little or no benefits gained.

Electrical engineers design projects using the type of overcurrent protection device they deem most beneficial and best suited to the application, and they select ratings of each device to obtain the appropriate amount of coordination utilizing the particular device. Enforcement of the model code requirement would impede efforts to accomplish this goal.

The California Building Standards Commission Plumbing, Electrical, Mechanical and Energy Code Advisory Committee recommended that Articles 700.27 and 701.18 should be required for OSHPD 3 licensed clinics. These facilities are under the local jurisdiction and are sometimes designed by electrical contractors and not licensed electrical engineers. An electrical contractor does not have the technical expertise to decide whether or not to comply with these Articles only a licensed electrical engineer has this expertise. Regulations require that electrical systems for OSHPD 1, 2 and 4 be designed by a licensed electrical engineer.

TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS:

There are no technical, theoretical and empirical studies, reports or other documents to be identified regarding the development of these proposed regulations.

CONSIDERATION OF REASONABLE ALTERNATIVES

There were no alternatives considered by the Office. The proposed code changes are editorial and technical modifications that provide clarification.

REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS.

The proposed regulations will not adversely impact small businesses.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS.

These regulations will have no significant adverse impact of businesses.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

The proposed code changes do not duplicate or conflict with federal regulations.